McCain Foods USA, Inc.	**)**	**Department**
Aroostook County	**)**	**Findings of Fact and Order**
Easton, Maine	**)**	**Part 70 Air Emission License**
A-436-70-A-I	**)**	

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

FACILITY	McCain Foods USA, Inc. (McCain)
LICENSE NUMBER	A-436-70-A-I
LICENSE TYPE	Initial Part 70 License
NAICS CODES	311411
NATURE OF BUSINESS	Frozen Potato Products
FACILITY LOCATION	Easton, Maine
DATE OF LICENSE ISSUANCE	December 2, 2004
LICENSE EXPIRATION DATE	December 2, 2009

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
Boiler #1	22.5 MMBtu/hr	Fuel Burning, No. 6 oil, vegetable oil, specification waste oil
Boiler #2	22.5 MMBtu/hr	Fuel Burning, No. 6 oil, vegetable oil, specification waste oil
Boiler #3	60.0 MMBtu/hr	Fuel Burning, No. 6 oil, vegetable oil, specification waste oil
Boiler #4	60.0 MMBtu/hr	Fuel Burning, No. 6 oil, vegetable oil, specification waste oil
Boiler #5	98.5 MMBtu/hr	Fuel Burning, No. 6 oil, vegetable oil, specification waste oil
Specialty Fryer	15,000 lbs of finished product/hr	Process Equipment

Prime 1 Fryer	30,000 lbs of finished product/hr	Process Equipment
Prime 2 (Batter) Fryer	45,000 lbs of finished product/hr	Process Equipment
Prime 1 Dryer	30,000 lbs of finished product/hr	Process Equipment
Prime 2 Dryer	45,000 lbs of finished product/hr	Process Equipment
Biogas Flare	25.1 MMBtu/hr	Flare, Biogas
Fire Pump Engine	1.01 MMBtu/hr	Fuel Burning, Diesel
Emergency Generator	1.6 MMBtu/hr	Fuel Burning, Diesel
Parts washers	Various sizes	Degreasers

McCain has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

C. Application Classification

The application for McCain does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Process Description

McCain's Easton facility is a potato processing plant which produces frozen potato products, such as french fries and tater tots, for the retail and service markets. Raw potatoes are delivered to the facility by truck. Before processing, the potatoes are sent through rock traps to remove any rocks or other large foreign material and through brushes to remove soil. The washed potatoes are steam peeled, scrubbed, and then conveyed by water to the trim room for removal of undesirable portions or rejection. Prior to moving to the cutter deck, the potatoes are pre-heated to minimize shattering during the cutting process. Following cutting, the potatoes are fed through automatic defect removers and then move through one of three fryer lines. Line 1 is the prime 1 fryer line, used to produce prime product. Line 2 is the specialty line, used to process specialty products, such as tater tots and potato wedges. Line 3 is the prime 2 fryer line, which is used to produce both prime and batter product. Prior to frying, the potatoes are

blanched to create a better color after frying. Lines 1 and 3 include dryers which remove excess moisture and set the starches prior to the potatoes being fried in vegetable oil. A retrograder (no air emissions), rather than a dryer, is used on Line 2. Following frying, the potatoes are frozen and packaged.

B. Boilers # 1, 2, 3 and 4, Oil-Fired Boilers

Boilers #1 and #2 were manufactured by Cleaver Brooks and each have a maximum design heat input capacity of 22.5 MMBtu/hr firing No. 6 fuel oil. The maximum firing rate for each boiler is 150 gals/hr assuming a heating value of 150,000 Btu/gal for the No. 6 fuel oil. The boilers were installed in 1961, prior to the New Source Performance Standards (NSPS) Subpart Dc applicability date. These boilers are used to provide steam for process operations as well as for heating purposes. Emissions from these boilers exit through separate 75-foot stacks.

Boilers #3 and #4 were manufactured by Cleaver Brooks and each have a maximum design heat input capacity of 60.0 MMBtu/hr firing No. 6 fuel oil. The maximum firing rate for each boiler is 400 gals/hr assuming a heating value of 150,000 Btu/gal for the No. 6 fuel oil. The boilers were installed in 1965, prior to the NSPS Subpart Dc applicability date. These boilers are used to provide steam for process operations as well as for heating purposes. Emissions from Boiler #3 exits through a 90-foot stack and emissions from Boiler #4 currently exits through a separate 90-foot stack, however, by June of next year this stack height will increase to 91 feet.

Used vegetable oil and specification waste oil are sometimes added to the No. 6 fuel oil in the oil storage tank for combustion in Boilers #1, #2, #3, and #4. The sulfur content of the specification waste oil can not exceed 2.0% by weight.

NO_x RACT Requirements

Chapter 138 of the Department's regulations requires that every source which has the potential to emit 100 tons per year or more of NO_x apply Reasonably Available Control Technology (RACT) to their applicable NO_x emissions. Chapter 138 NO_x RACT requirements are incorporated into this initial Part 70 license.

NO_x RACT for Boilers #1 and #2 is complying with Sections 3(L)(1) & (2) of Chapter 138, which includes record keeping requirements and documentation of annual tune-ups.

NO_x RACT for Boilers #3 and #4 is the retrofit of the boilers with low-NO_x burner technology designed to minimize NO_x emissions and compliance with a 0.4 lb/MMBtu emission limitation. Boilers #3 and #4 must also comply with Section 3(L)(1) & (2) of Chapter 138, which includes record keeping requirements and documentation of annual tune-ups.

Streamlining

Opacity

McCain accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(a)(i) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

Periodic Monitoring

Periodic monitoring shall consist of record keeping which includes records of fuel use through purchase receipts indicating amounts (gallons) and percent sulfur by weight.

Based on best management practices, it is unlikely that the boilers will exceed the opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing is not required. However, neither the EPA nor the State is precluded from performing its own testing and may take enforcement action for any violations discovered.

C. Boiler # 5, Oil-Fired Boiler

Boiler #5 was manufactured by English Boiler & Tube with a maximum design heat input capacity of 98.5 MMBtu/hr firing No. 6 fuel oil. The #6 fuel oil fired will not exceed a maximum sulfur content of 0.5% by weight on a 30-day rolling average. The maximum firing rate for the boiler is 656.7 gals/hr assuming a heating value of 150,000 Btu/gal for the No. 6 fuel oil. The boiler was installed in 1999 and is therefore subject to New Source Performance Standards (NSPS) Subpart Dc requirements. This boiler is used to provide steam for process operations as well as for heating purposes. The boiler is equipped with a low NO_x burner and flue gas recirculation. As required by NSPS, McCain operates a Continuous Opacity Monitoring System (COMS) to demonstrate compliance with opacity limitations for this boiler. Emissions from the boiler exit through a 110-foot stack.

Used vegetable oil and specification waste oil are sometimes added to the No. 6 fuel oil in the oil storage tank for combustion in Boiler #5. The sulfur content of the specification waste oil burned in this boiler can not exceed 0.5% by weight.

Streamlining

Opacity

McCain accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(a)(i) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The BPT limit was determined through Air Emission License A-436-71-D-A issued March 12, 1999, which addressed NSPS and established BACT. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

Particulate Matter

McCain accepts streamlining for particulate matter requirements. Chapter 103 of the Department's regulations and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

Sulfur Dioxide

McCain accepts streamlining for sulfur dioxide requirements. Chapter 106 and BPT limits are applicable. The BPT sulfur dioxide limit is more stringent. Therefore, only BPT requirements are included in this license.

Periodic Monitoring

Periodic monitoring shall consist of record keeping which includes records of fuel use through purchase receipts indicating amounts (gallons) and analysis of fuel oil samples for percent sulfur by weight.

Continuous emission monitoring includes operation of a continuous monitor for opacity in accordance with the applicable requirements in Chapter 117 of the Department's Regulations.

D. Process Equipment

McCain currently operates two prime lines and a specialty line. Prime Line 1 consists of a prime fryer and dryer, each with a maximum production rate of approximately 30,000 lbs/hr. The second prime line, Prime 2 (Line 3), includes a prime/batter fryer and a dryer, each with a maximum production rate of approximately 45,000 lbs/hr. The specialty line (Line 2) includes a fryer for production of specialty product, with a maximum production rate of

approximately 15,000 lbs/hr. There is no dryer associated with this fryer line. Particulate emissions from the fryers are controlled with wet centrifugal collector rotoclones (one rotoclone for each of the Line 1 and Line 2 fryers and two rotoclones for the Line 3 fryer). Emissions from fryer operations were determined to be condensable organic and filterable particulate.

Particulate is emitted from the dryers, but no control technologies are feasible for this equipment. Due to the high moisture content of the exhaust from these units and the high air flow, control of PM is considered technically and economically infeasible.

Streamlining

Opacity

McCain accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(3)(d) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

Particulate Matter

McCain accepts streamlining for particulate matter requirements. Chapter 105 of the Department's regulations and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

Periodic Monitoring

Periodic monitoring shall consist of record keeping of production (tons of finished product) and hours of operation for each fryer line, including production for prime product and production for batter product for Line 3.

Based on best management practices and the particulate control equipment utilized, it is unlikely that the process equipment will exceed the opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing is not required. However, neither the EPA nor the State is precluded from performing its own testing and may take enforcement action for any violations discovered.

E. Biogas Flare

McCain flares biogas from wastewater treatment operations at the Easton facility. The maximum heat input capacity of the flare is 25.1 MMBtu/hr. With the exception of SO_2, emissions from flaring of the biogas are negligible. SO_2 may be

produced from the conversion of hydrogen sulfide in the biogas. The flare height is 20 feet above ground-level.

Periodic Monitoring
Periodic monitoring shall consist of record keeping of biogas production.

F. Stationary Internal Combustion Engines

Stationary internal combustion engines include one fire pump engine, used in emergencies only, which fires low sulfur diesel fuel oil. The engine was manufactured by Detroit Diesel and has a design heat input capacity of approximately 1.01 MMBtu/hr. This fire pump engine was installed in 1999.

McCain accepted license restrictions of hours of operation for the fire pump engine which result in NO_x emissions below 10 tons per year, and therefore exempts this unit from NO_x RACT requirements.

McCain is also licensed to operate an emergency generator, which was installed in 2002 in the screening building at the wastewater treatment plant. This generator was manufactured by Olympia and has a design capacity of 1.6 MMBtu/hr. Low sulfur diesel fuel oil is fired in the generator. Operating hours are also limited for this emergency unit.

Streamlining
Opacity
McCain accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(f) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable to the fire pump engine. Chapter 101, Section 2(B)(1)(d) of the Department's regulations and BPT requirements are applicable to the emergency generator. The BPT opacity limits are more stringent. Therefore, only the more stringent BPT opacity limits are included in this license.

Sulfur Dioxide
McCain accepts streamlining for sulfur dioxide requirements. Chapter 106 and BPT requirements are applicable. The BPT limit for sulfur dioxide is more stringent. Therefore, only the more stringent BPT sulfur dioxide limit is included in this license.

Periodic Monitoring
Periodic monitoring shall consist of record keeping which includes records of hours or operation for the fire pump engine and for the emergency generator and

records of fuel use through purchase receipts indicating amounts (gallons) and percent sulfur by weight.

Based on the type of fuel used and hours of operation of these units and operating in a manner consistent with good air pollution control practices, it is unlikely that these units will exceed the opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing is not required. However, neither the EPA nor the State is precluded from performing its own testing and may take enforcement action for any violations discovered.

G. Degreaser Units

McCain operates parts washers which are rented and not owned by the company. Currently Safety Kleen owns and services these units. Each of these units have various unit capacities, with the sizes and number of units allowed to vary. These units must comply with the operation standards of Chapter 130.

Periodic monitoring
Periodic monitoring for the degreaser units shall consist of monthly record keeping of solvent added and removed.

H. Facility Emissions

Total Licensed Annual Emissions for the Facility (Tons/year)
(used to calculate the license fee)

Equipment	PM	PM_{10}	SO_2	NO_X	CO	VOC
Boiler #1	19.7	19.7	206.3	49.3	3.3	0.9
Boiler #2	19.7	19.7	206.3	49.3	3.3	0.9
Boiler #3	52.6	52.6	550.1	105.1	8.8	2.5
Boiler #4	52.6	52.6	550.1	105.1	8.8	2.5
Boiler #5	34.6	34.6	224.3	129.6	69.2	3.7
Fryers	63.9	63.9	--	--	--	--
Dryers	41.2	41.2	--	--	--	--
Biogas Flare	--	--	54.4	--	--	--
Fire Pump	0.1	0.1	0.1	1.1	0.2	0.1
Emrg diesel gen	0.1	0.1	0.1	1.8	0.4	0.1
TOTALS (TPY)	**284.5**	**284.5**	**1791.7**	**441.3**	**94.0**	**10.7**

III. AMBIENT AIR QUALITY ANALYSIS

A. Overview

A combination of screening and refined modeling was performed to show that emissions from McCain's, in conjunction with other sources, would not cause or contribute to violations of Maine Ambient Air Quality Standards (MAAQS) for SO_2, PM_{10}, NO_2 and CO or to Class II increments for SO_2, PM_{10} and NO_2.

Since the current licensing action for McCain's represents a minor modification to an existing major source and the nearest Class I area is approximately 175 kilometers away, MEDEP has determined that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

B. Model Inputs

The ISCST3 model was used in refined simple terrain mode to address standards and increments in all areas. In addition, the COMPLEX-I VALLEY (CI-VM) model was used to evaluate impacts in intermediate and complex terrain, i.e., areas where terrain elevations exceed the proposed stack-top elevations. Since McCain's stacks are greater than H + 0.5L (where H is the height of the controlling structure and L is the lesser of the height or maximum projected width of that structure), no cavity analyses were performed.

The SCREEN3 model was used to account for the biogas emissions from the wastewater treatment facility through the use of a flare.

All modeling was performed in accordance with all applicable requirements of the Maine Department of Environmental Protection, Bureau of Air Quality (MEDEP-BAQ) and the United States Environmental Protection Agency (USEPA).

A valid 5-year hourly meteorological off-site database was used for the refined modeling. The wind data was collected at a height of 10.00 meters at the Caribou National Weather Service station meteorological site during the 5-year period 1985-1989. Missing data were interpolated or coded as missing. Surface data collected at Loring Air Force Base were substituted for missing data. Hourly cloud cover, ceiling height and surface wind speed from Caribou NWS were used to calculate stability. Hourly mixing heights were derived from surface and upper air data collected at Caribou NWS station.

Stack parameters used in the modeling for McCain's facility and other nearby sources are listed in Table III-1. The modeling analysis accounted for the potential of building wake effects on emissions from all modeled stacks that are below their respective formula GEP stack heights.

Table III-1: Stack Parameters

Facility/Stack	Stack Base Elevation (m)	Stack Height (m)	GEP Stack Height (m)	Stack Diameter (m)	UTM Easting NAD27 (km)	UTM Northing NAD27 (km)
CURRENT/PROPOSED						
McCain Foods, Inc.						
Stack #1 (Boiler #1)	194.77	22.86	33.02	0.76	583.818	5168.125
Stack #2 (Boiler #2)	194.77	22.86	33.02	0.76	583.820	5168.130
Stack #3 (Boiler #3)	194.77	27.43	33.02	1.07	583.825	5168.135
Stack #4 (Boiler #4)	194.77	27.74	33.02	1.42	583.828	5168.146
Stack #5 (Boiler #5)	194.77	33.53	33.02	1.14	583.800	5168.141
Stack #6 (Co-Product Fryer)	194.77	17.07	33.02	0.50	583.822	5168.106
Stack #7 (Prime Fryer)	194.77	14.63	33.02	0.50	583.843	5168.101
Stack #8 (Batter Fryer)	194.77	16.46	28.96	0.50	583.868	5168.094
Stack #9 (Batter Fryer)	194.77	16.46	28.96	0.50	583.872	5168.103
Stack #10 (Prime – Line 1 Dryer)	194.77	13.72	28.83	0.76	583.824	5168.064
Stack #11 (Prime – Line 1 Dryer)	194.77	13.72	28.83	0.76	583.825	5168.065
Stack #12 (Prime – Line 1 Dryer)	194.77	13.72	33.02	0.76	583.830	5168.074
Stack #13 (Prime – Line 1 Dryer)	194.77	13.72	33.02	0.76	583.831	5168.077
Stack #14 (Batter – Line 3 Dryer)	194.77	14.33	28.96	0.76	583.865	5168.102
Stack #15 (Batter – Line 3 Dryer)	194.77	14.33	28.83	0.76	583.870	5168.112
Stack #16 (Batter – Line 3 Dryer)	194.77	14.33	28.83	0.76	583.873	5168.120
JM Huber Corporation						
Main Stack	196.60	45.70	76.50	1.93	583.640	5168.280
Stack – Press Vents	195.70	29.30	77.11	1.52	583.650	5168.260
BASELINE – 1987						
McCain Foods, Inc.						
Stack #1	194.77	22.86	28.96	0.76	583.818	5168.125
Stack #2	194.77	22.86	28.96	0.76	583.820	5168.130
Stack #3	194.77	22.86	28.96	1.07	583.825	5168.135
Stack #4	194.77	22.86	28.96	1.42	583.828	5168.146
JM Huber Corporation						
Main Stack	196.60	45.70	76.50	1.93	583.640	5168.280
Press Vents	195.70	29.30	77.11	1.52	583.650	5168.260
BASELINE – 1977						
McCain Foods, Inc.						
Stack #3	194.77	12.19	28.96	1.07	583.825	5168.135
Stack #4	194.77	12.19	28.96	1.42	583.828	5168.146

Emission parameters for McCain's and other nearby sources for MAAQS and increment modeling are listed in Table III-2. Emission parameters for McCain's are based on the maximum license allowed operating configuration. For the purpose of determining NO_2 and PM_{10} impacts, all NO_x and PM emissions were conservatively assumed to convert to NO_2 and PM_{10}, respectively.

Table III-2 : Emission Parameters

Facility/Stack	Averaging Period(s)	SO_2 (g/s)	PM_{10} (g/s)	NO_2 (g/s)	CO (g/s)	Stack Temp (K)	Stack Velocity (m/s)
CURRENT							
McCain Foods, Inc.							
Stack #1 (Boiler #1)	All	5.93	0.57	1.42	0.10	500.00	6.07
Stack #2 (Boiler #2)	All	5.93	0.57	1.42	0.10	500.00	6.07
Stack #3 (Boiler #3)	All	15.83	1.51	3.02	0.25	550.00	9.00
Stack #4 (Boiler #4)	All	15.83	1.51	3.02	0.25	550.00	5.12
Stack #5 (Boiler #5)	All	6.45	1.00	3.73	1.99	556.48	18.59
Stack #6 (Co-Product Fryer)	All	nm	0.72	nm	nm	343.15	14.43
Stack #7 (Prime Fryer)	All	nm	0.36	nm	nm	344.82	24.05
Stack #8 (Batter Fryer)	All	nm	0.38	nm	nm	360.93	24.05
Stack #9 (Batter Fryer)	All	nm	0.38	nm	nm	360.93	24.05
Stack #10 (Prime – Line 1 Dryer)	All	nm	0.12	nm	nm	313.71	15.77
Stack #11 (Prime – Line 1 Dryer)	All	nm	0.12	nm	nm	313.71	15.77
Stack #12 (Prime – Line 1 Dryer)	All	nm	0.12	nm	nm	313.71	15.77
Stack #13 (Prime – Line 1 Dryer)	All	nm	0.12	nm	nm	313.71	15.77
Stack #14 (Batter – Line 3 Dryer)	All	nm	0.24	nm	nm	319.26	16.56
Stack #15 (Batter – Line 3 Dryer)	All	nm	0.24	nm	nm	319.26	16.56
Stack #16 (Batter – Line 3 Dryer)	All	nm	0.24	nm	nm	319.26	16.56
JM Huber Corporation							
Main Stack (Firing Wood)	All	nm	2.59	6.93	28.98	398.40	21.21
Main Stack (Firing Oil)	All	5.25	nm	nm	nm	368.60	7.06
Stack – Press Vents	All	nm	0.56	nm	nm	310.80	15.20
CURRENT ACTUALS							
McCain Foods, Inc.							
Boiler #1	Short Term	1.92	0.18	nm	nm	500.00	1.96
	Annual	0.87	0.08	0.21	nm	500.00	1.96
Boiler #2	Short Term	2.39	0.23	nm	mn	500.00	2.45
	Annual	1.22	0.12	0.29	nm	500.00	2.45
Boiler #3	Short Term	9.39	0.90	nm	nm	550.00	5.34
	Annual	5.87	0.56	1.12	nm	550.00	5.34
Boiler #4	Short Term	8.51	0.81	nm	nm	550.00	2.75
	Annual	6.13	0.59	1.17	nm	550.00	2.75

Boiler #5	Short Term	3.87	0.60	nm	nm	556.48	11.15
	Annual	3.26	0.50	1.88	nm	556.48	11.15
JM Huber Corporation							
Main Stack	Short Term	0.20	2.20	nm	nm	398.40	18.02
	Annual	0.19	2.07	5.54	nm	398.40	14.86
Stack – Press Vents	Short Term	nm	0.48	nm	nm	310.80	12.85
	Annual	nm	0.45	nm	nm	310.80	12.11
BASELINE – 1987							
McCain Foods, Inc.							
Stack #1	Annual	nm	nm	0.17	nm	500.00	3.52
Stack #2	Annual	nm	nm	0.06	nm	500.00	3.52
Stack #3	Annual	nm	nm	0.81	nm	550.00	5.54
Stack #4	Annual	nm	nm	0.73	nm	550.00	3.15
JM Huber Corporation							
Main Stack	Annual	nm	nm	2.43	nm	378.80	18.53
BASELINE – 1977							
McCain Foods, Inc.							
Stack #3	Short Term	8.01	0.73	nm	nm	550.00	4.32
	Annual	3.79	0.34	nm	nm	550.00	3.02
Stack #4	Short Term	8.01	0.73	nm	nm	550.00	2.46
	Annual	3.79	0.34	nm	nm	550.00	1.72

Key: nm = Not Modeled

A SCREEN3 analysis was completed to account for the biogas emissions from the flare at the wastewater treatment facility. Parameters used in the modeling for McCain's proposed flare are listed in Table III-3. For the purpose of determining SO_2 impacts, all H_2S emissions were conservatively assumed to convert to SO_2.

Table III-3 : Flare Stack/Emission Parameters

Facility/Stack	Averaging Periods	SO_2 Emission Rate (g/s)	Flare Height (m)	Effective Release Height (m)	Total Heat Release (Cal/Sec)
McCain Foods, Inc.					
Wastewater Flare	All	2.40	10	10.50	1,758,370

C. Single Source Modeling Impacts

ISCST3 refined modeling, using the latest year of meteorological data (1989), and CI-VM screening modeling was performed for 7 operating scenarios that represented 2 maximum, 4 typical and 1 minimum operations for McCain's. Since it had been determined that the maximum load case predicted the maximum impacts for all pollutants/averaging periods, only the maximum load case was

examined further in the ISCST3 refined modeling and CI-VM screening modeling.

Model results for McCain's alone (less the flare), in simple and complex terrain, are shown in Tables III-4 and III-5, respectively. All SO_2, PM_{10} and NO_2 averaging period impacts were significant in both modeling analyses. It was demonstrated that McCain's would have no significant impacts for all CO averaging periods in simple and complex terrain; thus, no further analysis was required for these pollutant/terrain combinations. Pollutant averaging periods where the respective maximum predicted impact exceeded the respective significance level are indicated in boldface type.

Table III-4 : Maximum ISCST3 Predicted Impacts from McCain's Alone

Pollutant	Averaging Period	Max Impact ($\mu g/m^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Class II Significance Level ($\mu g/m^3$)
SO_2	3-hour	**878.14**	586.000	5169.000	243.84	**25**
	24-hour	**190.83**	583.600	5168.400	201.17	**5**
	Annual	**20.68**	583.800	5168.400	196.60	**1**
PM_{10}	24-hour	**117.12**	583.000	5168.400	196.60	**5**
	Annual	**12.94**	583.800	5168.400	196.60	**1**
NO_2	Annual	**4.86**	583.800	5168.400	196.60	**1**
CO	1-hour	37.96	583.500	5171.000	237.74	**2000**
	8-hour	16.79	587.000	5170.000	243.84	**500**

Table III-5 : Maximum CI-VM Predicted Impacts from McCain's Alone

Pollutant	Averaging Period	Max Impact ($\mu g/m^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Class II Significance Level ($\mu g/m^3$)
SO_2	3-hour	**464.58**	582.850	5169.871	237.74	**25**
	24-hour	**129.05**	582.850	5169.871	237.74	**5**
	Annual	**41.30**	582.850	5169.871	237.74	**1**
PM_{10}	24-hour	**26.70**	583.030	5169.581	228.60	**5**
	Annual	**8.54**	583.030	5169.581	228.60	**1**
NO_2	Annual	**8.56**	583.120	5170.901	256.03	**1**
CO	1-hour	138.72	582.922	5170.667	265.20	**2000**
	8-hour	97.01	582.922	5170.667	265.20	**500**

D. Combined Source Modeling Impacts

Because modeled impacts from McCain's alone were greater than significance levels for all SO_2, NO_2 and PM_{10} averaging periods, other sources not explicitly included in the modeling analysis must be included by using representative background concentrations for the area.

Northern Maine rural background concentrations derived from representative sites are listed in Table III-6.

TABLE III-6 : Background Concentrations (µg/m³)

Pollutant	Averaging Period	Background Concentration	Date
SO_2	3-hour	**24**	2003[1]
	24-hour	**13**	
	Annual	**5**	
PM_{10}	24-hour	**32**	2003[1]
	Annual	**10**	
NO_2	Annual	**11**	1995[2]

Notes:

[1] Robinson site, Easton

[2] TLSP site, Cape Elizabeth

MEDEP-BAQ identified other sources whose impacts would potentially be significant in McCain's significant impact area. Only one other source was explicitly included in the modeling: J.M. Huber Corporation (Easton).

Table III-7 summarizes the maximum combined source impacts. The predicted impacts, which include the impacts from the flare (regardless of location), are added to conservative background concentrations to obtain the final predicted impact.

All combined source SO_2, PM_{10} and NO_2 averaging period impacts, including emissions from the flare and background concentrations, were below their respective MAAQS. Because the impacts using this method meet MAAQS, no further MAAQS modeling for McCain's need be performed.

Table III-7 : ISCST3/CI-VM Maximum Combined Source Impacts

Pollutant	Averaging Period	ISCST3/ CI-VM Max (µg/m³)	Receptor UTM-E (km)	Receptor UTM-N (km)	Receptor Elevation (m)	SCREEN3 Flare Max (µg/m³)	Back-ground (µg/m³)	Max Total Impact (µg/m³)	MAAQS (µg/m³)
SO_2	3-hour	878.82*	586.000	5169.000	243.84	25.20	24	922.02	1150
	24-hour	194.99*	583.600	5168.400	201.17	4.53	13	212.52	230

	Annual	42.33**	582.850	5169.871	237.74	2.24	5	49.57	57
PM_{10}	24-hour	117.12*	583.000	5168.400	196.60	N/A	32	149.12	150
	Annual	13.67 *	583.800	5168.400	196.60	N/A	10	23.70	40
NO_2	Annual	10.11**	582.850	5169.871	237.74	N/A	11	21.11	100

Key: * = ISC3 Result, ** = CI-VM Result
N/A=not applicable

E. Increment

McCain's maximum increment impacts were predicted using ISCST3 refined modeling in simple terrain and CI-VM in complex terrain. For addressing increment impacts in intermediate terrain (i.e., terrain above stack top and below plume centerline), the ISCST3 and CI-VM were run individually, and the higher of the two increment impacts chosen. It is important to note that McCain's conservatively modeled NO_2 increment by using the maximum licensed allowed emission rate with no credit to be taken for any McCain's sources existing in the 1987 NO_2 baseline year.

Results of the single and combined source increment analyses are shown in Tables III-8 and Table III-9, respectively. All McCain's alone and combined source modeled increment impacts were below all SO_2, PM_{10} and NO_2 increment standards. Because the predicted increment impacts meet increment standards, no further increment modeling for McCain's needed to be performed.

Table III-8 : Increment Consumption in Class II Areas from McCain's Alone

Pollutant	Averaging Period	Max Impact (µg/m³)	Receptor UTM-E (km)	Receptor UTM-N (km)	Receptor Elevation (m)	Model Predicting Highest Concentration	Class II Increment (µg/m³)
SO_2	3-hour	197.74	583.600	5168.200	201.17	ISCST3	512
	24-hour	35.88	582.566	5168.214	201.17	ISCST3	91
	Annual	7.62	583.120	5170.901	256.03	CI-VM	20
PM_{10}	24-hour	3.45	583.566	5168.214	201.17	ISCST3	30
	Annual	0.93	583.120	5170.901	256.03	CI-VM	17
NO_2	Annual	8.56	583.120	5170.901	256.03	CI-VM	25

Table III-9 : Combined Source Class II Increment Consumption

Pollutant	Averaging Period	Max Impact (µg/m³)	Receptor UTM-E (km)	Receptor UTM-N (km)	Receptor Elevation (m)	Model Predicting Highest Concentration	Class II Increment (µg/m³)
SO_2	3-hour	197.74	583.600	5168.200	201.17	ISCST3	512
	24-hour	35.89	582.566	5168.214	201.17	ISCST3	91

	Annual	7.66	583.120	5170.901	256.03	CI-VM	20
PM_{10}	24-hour	21.78	583.566	5168.214	201.17	ISCST3	30
	Annual	1.95	583.060	5171.071	262.10	CI-VM	17
NO_2	Annual	10.11	582.850	5169.871	237.74	CI-VM	25

F. Class I Impacts

Since the current licensing action for McCain's represents a minor modification to an existing major source and the nearest Class I area is approximately 175 kilometers away, MEDEP has determined that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

G. Summary

In summary, it has been demonstrated that McCain's in its proposed configuration will not cause or contribute to a violation of any SO_2, PM_{10}, NO_2 or CO averaging period MAAQS. It has also been demonstrated that McCain's will not cause or contribute to a violation of any SO_2, PM_{10}, or NO_2 averaging period Class II increment standards.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-436-70-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to McCain pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such, the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Standard Statements

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not

applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated October 27, 1999.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
a.	Boilers #1, #2, #3, and #4	40 CFR Part 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generating Units for which Construction is Commenced after August 17, 1971	Commenced construction prior to 1971
b.	Boiler #5	40 CFR Part 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generating Units for which Construction is Commenced after August 17, 1971	Boiler < 250 MMBtu/hr
c.	Boilers #1, #2, #3, #4, and #5	40 CFR Part 60 Subpart Da	Standards of Performance for Electrical Steam Generating Units for which Construction is Commenced after September 18, 1978	Not an electric utility
d.	Boilers #1, #2, #3, #4, and #5	40 CFR Part 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	All Boilers < 100 MMBtu/hr each
e.	Fire Pump Engine and Generator	Chapter 103	Fuel Burning Equipment Particulate Emission Standard	Each unit is < 3 MMBtu/hr
f.	Flare	Chapter 104	Incinerator Particulate Emission Standard	PM emissions from flare are negligible
g.	Flare	40 CFR Part 60, Subpart E	Standards of Performance for Incinerators	Solid waste is not combusted

h.	Facility	Chapter 111	Petroleum Liquid Storage Vapor Control	No petroleum liquids stored in vessels with capacities > 39,000 gals
i.	Boilers #1, #2, #3 and #4	Chapter 117	Source Surveillance	Boilers are < 100 MMBtu/hr each and are not subject to NSPS
j.	Facility	Chapter 118	Gasoline Dispensing Facilities	Facility does not dispense gasoline
k.	Facility	Chapter 129	Surface Coating Facilities	No surface coating operations at facility
l.	Facility	Chapter 134	VOC RACT	Facility-wide potential VOC emissions, excluding exempted equipment, do not equal or exceed 40 tons/yr

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

(a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

(b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

(c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

(d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

Standard Conditions

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;
Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;
Enforceable by State-only

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:

(i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

(ii) to demonstrate compliance with the applicable emission standards; or

(iii)pursuant to any other requirement of this license to perform stack testing.

(b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(c) submit a written report to the Department within thirty (30) days from date of test completion.

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

(a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

a. The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

b. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

c. All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

(a) The identification of each term or condition of the Part 70 license that is the basis of the certification;

(b) The compliance status;

(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(e) Such other facts as the Department may require to determine the compliance status of the source.

SPECIFIC CONDITIONS

(14) Boilers #1, #2, #3 and #4

A. McCain is licensed to fire No.6 fuel oil in Boilers #1, #2, #3, and #4 with a maximum sulfur content not to exceed 2.0% by weight. The sulfur content of the fuel oil fired shall be demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. McCain shall be allowed to dispose of reclaimed vegetable oil from the facility by burning it in any one of these boilers. McCain shall maintain records of the quantity of vegetable oil burned in all four boilers combined. [MEDEP Chapter 140, BPT]

C. Specification waste oil may also be burned in any of these boilers. Only specification waste oil meeting the criteria "specification" waste oil (as defined in the "Waste Oil Management Rules") shall be used in the boilers. For specification waste oil, McCain shall maintain records of a representative sample of the waste oil utilized demonstrating that the waste oil meets the allowable level for the constituents and property in accordance with the Department's "Waste Oil Management Rules". The sulfur content of the specification waste oil burned in Boilers #1 through #4 shall not exceed 2.0% by weight. A log shall be kept recording the quantity of waste oil fired in all four boilers combined, and a representative waste oil analysis shall be submitted to the Department upon request. **Enforceable by State-only**

D. McCain shall perform an annual tune-up on Boilers #1, #2, #3, and #4 and maintain the following records, as described in Chapter 138 Section 3(L)(2):
1. Record of the annual tune-ups;
2. A tune-up procedure file must be kept on-site and made available to the Department upon request;
3. An oxygen/carbon monoxide curve or an oxygen/smoke curve must be kept on file;
4. Once the optimum excess oxygen setting has been determined, McCain must verify periodically that the setting remains at that value; and
5. If the minimum oxygen level found is substantially higher than the value provided by the combustion unit manufacturer, McCain must improve the fuel and air mixing, thereby allowing operation with less air.
[MEDEP Chapter 138, NO_x RACT]

E. Emissions from each of Boilers #1 and #2 shall not exceed the following limits:

Pollutant	***lb/MMBtu***	***Origin and Authority***	***Enforceability***
PM	0.20	MEDEP, Chapter 103, Section 2(B)(1)(a)	**Federally Enforceable**
NO_X	0.50	MEDEP Chapter 140, BPT	**Enforceable by State-only**

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	4.5	MEDEP Chapter 140, BPT	**Enforceable by State-only**
PM_{10}	4.5	MEDEP Chapter 140, BPT	**Enforceable by State-only**
SO_2	47.1	MEDEP Chapter 140, BPT	**Enforceable by State-only**
NO_X	11.25	MEDEP Chapter 140, BPT	**Enforceable by State-only**
CO	0.75	MEDEP Chapter 140, BPT	**Enforceable by State-only**
VOC	0.21	MEDEP Chapter 140, BPT	**Enforceable by State-only**

F. For Boilers #1 and #2, the lb/MMBtu particulate limits are demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A upon request by the Department. [MEDEP Chapter 140, BPT]

G. For Boilers #1 and #2, the lb/MMBtu NO_x limit and the pound per hour limits are demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A upon request by the Department. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

H. Emissions from each of Boilers #3 and #4 shall not exceed the following limits:

Pollutant	***lb/MMBtu***	***Origin and Authority***	***Enforceability***
PM	0.20	MEDEP, Chapter 103, Section 2(B)(1)(a)	**Federally Enforceable**
NO_x	0.40	MEDEP Chapter 138, NO_x RACT	**Federally Enforceable**

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	12.0	MEDEP Chapter 140, BPT	**Enforceable by State-only**
PM_{10}	12.0	MEDEP Chapter 140, BPT	**Enforceable by State-only**
SO_2	125.6	MEDEP Chapter 140, BPT	**Enforceable by State-only**
NO_X	24.0	MEDEP Chapter 140, BPT	**Federally Enforceable**
CO	2.0	MEDEP Chapter 140, BPT	**Enforceable by State-only**
VOC	0.56	MEDEP Chapter 140, BPT	**Enforceable by State-only**

I. McCain shall perform NOx emissions stack testing on Boilers #3 and #4 in accordance with 40 CFR Part 60 or other methods approved or required by the Department by December 31, 2008. An annual tune-up is also required for these boilers, along with maintaining records of these tune-ups. [MEDEP Chapter 140, BPT]

J. For Boilers #3 and #4, the pound per hour and lb/MMBtu emission limits for PM and the lb/hour emission limits for SO_2, CO, and VOC are demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A upon request by the Department. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

K. McCain shall operate Boilers #3 and #4 with low-NO_x burner technology. [MEDEP Chapter 138, BPT]

L. McCain shall operate the Boilers #1, #2, #3, and #4 such that the visible emissions from each stack do not exceed 30% opacity on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a three-hour period. [MEDEP Chapter 140, BPT]

M. McCain shall raise Boiler #4's stack from a height of 90 feet to a height of 91 feet by June 30, 2005.

N. McCain shall maintain records of annual No. 6 fuel use indicating the quantity of fuel consumed (gallons), the percent (%) sulfur content of the fuel by weight, and the heat content of the fuel, demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

(15) Boiler #5

A. McCain is licensed to fire No. 6 fuel oil in Boiler #5 with a maximum sulfur content not to exceed 0.5% by weight. Fuel use records and delivery receipts shall be maintained. Compliance with the fuel oil sulfur limit shall be determined on a 30-day rolling average basis, demonstrated through sampling and analysis of the fuel oil after each new shipment as required in 40 CFR Part 60 Section 60.46C(d)(2). [MEDEP Chapter 140, BPT]

B. McCain shall be allowed to dispose of reclaimed vegetable oil from the facility by burning it in Boiler #5. McCain shall maintain records of the quantity of vegetable oil burned in Boiler #5. [MEDEP Chapter 140, BPT]

C. Specification waste oil may also be burned in Boiler #5. Only specification waste oil meeting the criteria "specification" waste oil (as defined in the "Waste Oil Management Rules") shall be used in the boiler. For specification waste oil, McCain shall maintain records of a representative sample of the waste oil utilized demonstrating that the waste oil meets the allowable level for the constituents and property in accordance with the Department's "Waste Oil Management Rules". The sulfur content of the specification waste oil burned in Boiler #5 shall not exceed 0.5% by weight. A log shall be kept recording the quantity of waste oil fired in Boiler #5, and a representative waste oil analysis shall be submitted to the Department upon request. **Enforceable by State-only**

D. Emissions from Boiler #5 shall not exceed the following limits:

Pollutant	***lb/MMBtu***	***Origin and Authority***	***Enforceability***
PM	0.08	MEDEP, Chapter 103, Section 2(B)(1)(a)	**Federally Enforceable**
NO_x	0.30	MEDEP Chapter 140, BPT	**Federally Enforceable**

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	7.9	MEDEP Chapter 140, BPT	**Federally Enforceable**
PM_{10}	7.9	MEDEP Chapter 140, BPT	**Federally Enforceable**
SO_2	51.2	MEDEP Chapter 140, BPT	**Federally Enforceable**
NO_X	29.6	MEDEP Chapter 140, BPT	**Federally Enforceable**
CO	15.8	MEDEP Chapter 140, BPT	**Federally Enforceable**
VOC	0.84	MEDEP Chapter 140, BPT	**Federally Enforceable**

E. The lb/MMBtu NO_x and PM limits and the pounds per hour limits are demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A upon request by the Department. [MEDEP Chapter 140, BPT]

F. McCain shall operate and maintain a continuous opacity monitoring system (COMS) for measuring the opacity of emissions discharged to the atmosphere from Boiler #5. The COMS shall be operated in accordance with applicable procedures of 40 CFR Part 60.13, 40 CFR Part 60, Appendices B and F, and Chapter 117 of the MEDEP regulations. [MEDEP Chapter 140, BPT]

G. McCain shall comply with the reporting and record keeping requirements as stated in 40 CFR Part 60.48c.

H. McCain shall comply with all other applicable requirements of Federal New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc.

I. McCain shall operate Boiler #5 such that the visible emissions from the stack does not exceed 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute block average period of not more than 27% opacity. Compliance shall be demonstrated through operation and maintenance of a COMS. [MEDEP Chapter 140, BPT & 40 CFR Part 60 Subpart Dc]

J. McCain shall maintain records of annual No. 6 fuel use indicating the quantity of fuel consumed (gallons) and the heat content of the fuel, demonstrated by purchase records from the supplier, and the percent (%) sulfur content of the fuel by weight on a 30-day rolling average basis. [MEDEP Chapter 140, BPT]

(16) Fryers

A. McCain shall operate and maintain in good working order and in accordance with manufacturer specifications the wet centrifugal collector rotoclones on each fryer. The rotoclones shall be operational at all times the fryers are in use. McCain shall maintain a log detailing maintenance and any malfunctions of the rotoclones including dates and durations of downtime. The log shall be made available to representatives of the Department upon request.

B. Emissions from the Specialty Fryer shall not exceed the following limit:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	5.7	MEDEP Chapter 140, BPT	**Federally Enforceable**

C. Emissions from the Prime 1 Fryer shall not exceed the following limit:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	2.9	MEDEP Chapter 140, BPT	**Enforceable by State-only**

D. Emissions from the Prime 2 Fryer shall not exceed the following limit:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	6.0	MEDEP Chapter 140, BPT	**Federally Enforceable**

E. Pound per hour limits for the Specialty Fryer and Prime 2 Fryer are demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A and 40 CFR Part 51 Appendix M, upon request by the Department. [MEDEP Chapter 140, BPT]

F. The pound per hour limit for the Prime 1 Fryer is demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A and 40 CFR Part 51 Appendix M, upon request by the Department. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

G. Visible emissions from each fryer shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 140, BPT]

H. McCain shall maintain records of the monthly production (tons of finished product) and hours of operation for each fryer line, including monthly

production for prime product and monthly production for batter product for Line 3.

I. McCain shall raise the two prime/batter fryer stacks from a height of 45 feet to a height of 54 feet by June 30, 2005.

(17) Dryers

A. Emissions from the Prime 1 Dryer shall not exceed the following limit:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	3.8	MEDEP Chapter 140, BPT	**Enforceable by State-only**

B. Emissions from the Prime 2 Dryer shall not exceed the following limit:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	5.6	MEDEP Chapter 140, BPT	**Federally Enforceable**

C. The pound per hour limit for the Prime 1 Dryer is demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A upon request by the Department. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

D. The pound per hour limit for the Prime 2 Dryer is demonstrated by stack testing in accordance with 40 CFR, Part 60, Appendix A upon request by the Department. [MEDEP Chapter 140, BPT]

E. Visible emissions from each dryer shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 140, BPT]

(18) Biogas Flare

A. McCain is licensed to flare biogas, with a flare heat input capacity of 25.1 MMBtu/hr.

B. Emissions from the flare shall not exceed the following limit:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
SO_2	19.1	MEDEP Chapter 140, BPT	**Enforceable by State-only**

C. McCain is limited to an annual total of 240 million cubic feet of biogas production. Compliance shall be demonstrated by maintaining records of the annual volume of biogas produced on a twelve-month rolling total basis.

(19) Emergency Stationary Internal Combustion Engines (SICE)

A. McCain is licensed to operate a 1.01 MMBtu/hr fire pump engine and a 1.6 MMBtu/hr emergency generator.

B. The diesel fuel fired in the SICE units shall not exceed a sulfur content of 0.05% by weight. McCain shall maintain records of purchase receipts from the supplier to document fuel use and demonstrate compliance with the low sulfur fuel requirement. [MEDEP Chapter 140, BPT]

C. Each SICE unit shall not exceed 500 hours of operation per year on a 12-month rolling average basis. [MEDEP Chapter 138, NO_x RACT] McCain shall keep a log of hours of operation for each unit. [MEDEP Chapter 140, BPT]

D. McCain shall maintain records of fuel usage for the fire pump engine and for the generator based on purchase receipts from the supplier. [MEDEP Chapter 140, BPT]

E. Emissions from the fire pump engine shall not exceed the following limits:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	0.31	MEDEP Chapter 140, BPT	**Federally Enforceable**
PM_{10}	0.31	MEDEP Chapter 140, BPT	**Federally Enforceable**
SO_2	0.29	MEDEP Chapter 140, BPT	**Federally Enforceable**
NO_X	4.45	MEDEP Chapter 140, BPT	**Federally Enforceable**
CO	0.96	MEDEP Chapter 140, BPT	**Federally Enforceable**
VOC	0.36	MEDEP Chapter 140, BPT	**Federally Enforceable**

F. Emissions from the emergency generator shall not exceed the following limits:

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	0.49	MEDEP Chapter 140, BPT	**Federally Enforceable**
PM_{10}	0.49	MEDEP Chapter 140, BPT	**Federally Enforceable**
SO_2	0.46	MEDEP Chapter 140, BPT	**Federally Enforceable**
NO_X	7.01	MEDEP Chapter 140, BPT	**Federally Enforceable**
CO	1.51	MEDEP Chapter 140, BPT	**Federally Enforceable**
VOC	0.56	MEDEP Chapter 140, BPT	**Federally Enforceable**

G. The fire pump engine shall not exceed 30% opacity on a six (6) minute block average basis except for no more than two six-minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

H. The emergency generator shall not exceed 20% opacity on a six (6) minute block average basis except for no more than two six-minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

(20) Parts Washers

Parts washers that use a solvent degreaser containing greater then 1% VOC are subject to the operational and record keeping requirements of MEDEP Chapter 130 which include, but are not limited to, the following:

A. McCain shall keep records of the amount of solvent added to each parts washer. [MEDEP Chapter 130]

B. McCain shall equip each cold cleaning degreaser unit with a cover that is easily operated with one hand if [MEDEP Chapter 130]:
   1. the solvent vapor pressure is greater than 15 millimeters of mercury measured at 100 ^{o}F by ASTM D323-89; or,
   2. the solvent is agitated; or,
   3. the solvent is heated.

C. McCain shall attach a permanent conspicuous label to each cold cleaning degreaser unit summarizing the following operational standards [MEDEP Chapter 130]:
   1. Close the covers on all solvent degreasing tanks when the tanks are not in use;
   2. Drain the cleaned parts for at least fifteen (15) seconds or until dripping stops;
   3. If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized or shower-type spray) at a pressure that does not exceed ten (10) pounds per square inch gauge pressure (psig);
   4. Do not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
   5. Minimize drafts to less than 40 meters/minute; and
   6. Refrain from operating the cold cleaning degreaser upon the occurrence of any visible solvent leak until such leak is repaired.

D. McCain shall not use any halogenated solvents in the degreasing tanks. [MEDEP Chapter 140, BPT]

E. For those degreasers containing less than 1% VOC, McCain shall keep the degreasers' Material Safety Data Sheets (MSDS) on file. {MEDEP Chapter 140, BPT]

(21) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour.

(22) Record Keeping Requirements

For all record keeping required by this license, the licensee shall maintain records of the most current six year period. [MEDEP Chapter 140]

A. Periodic Monitoring

The following is a list of the periodic monitoring required by this license:

1. McCain shall maintain a record of the No. 6 fuel oil purchased for Boilers #1 through #4 and for Boiler #5 based on a twelve-month rolling total.

2. McCain shall maintain a record of the sulfur content of the No. 6 fuel oil burned in Boilers #1 through #4 and in Boiler #5 and the sulfur content of the diesel fuel oil burned in the fire pump engine and the generator.

3. McCain shall maintain a record of waste oil and a record of reclaimed vegetable oil fired in Boilers #1 through #4 combined and in Boiler #5 based on a twelve-month rolling total.

4. McCain shall maintain a record of hours of operation and fuel oil purchases for the diesel fire pump engine and diesel generator.

5. McCain shall maintain a record regarding NO_x RACT tune-up requirements for Boilers #1, #2, #3, and #4.

6. McCain shall maintain a record of finished product and hours of operation for each fryer line on a monthly basis.

7. McCain shall maintain a record of the volume of biogas produced on a twelve-month rolling average basis.

8. McCain shall maintain a record of solvent usage for each parts washer.

[MEDEP Chapter 140, BPT]

(23) Continuous Opacity Monitoring System (COMS)

The COMS required by this license shall be the primary means of demonstrating compliance with opacity standards set by this Order, statute, state or federal regulation, as applicable, for Boiler #5. The licensee shall comply with the following: [MEDEP Chapter 140, BPT]

A. **Performance Specifications**

The COMS shall be operated in accordance with applicable procedures under Performance Specification I of Appendix B of 40 CFR Part 60. The COMS shall meet the performance criteria, operating procedures, and quality assurance procedures in accordance with the applicable requirements of 40 CFR Part 60.13, 40 CFR Part 60, Appendices B and F, and Chapter 117 of the Departments regulations.

The COMS data shall be monitored and recorded continuously, as required by Chapter 117 of the Department regulations, 40 CFR Part 52.1020(c)(24), and 40 CFR Part 60.13, Appendices B and F, except for period of calibration checks, zero and span adjustments and preventive maintenance or equipment malfunction. The COMS shall achieve the data recovery requirements of Chapter 117, Section 5 of the Department regulations (i.e., 95% data recovery as a percentage of source operation time per calendar quarter) and 40 CFR Part 52.1020(c)(24).
[MEDEP Chapter 117]

B. **Record keeping**

For the COMS required by this license, the licensee shall maintain records of the most current six year period and the records shall include:

1. Documentation that the COMS is continuously accurate, reliable, and operated in accordance with Chapter 117 and 40 CFR Part 52.1020(c)(24); [MEDEP Chapter 117]
2. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for the COMS as required by 40 CFR Part 51 Appendix P; and [MEDEP Chapter 117]
3. A report or other data indicative of compliance with the applicable opacity standard for those periods when the COMS was not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.

(24) Quarterly Reporting

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following for the Continuous Opacity Monitoring System (COMS) required by this license. [MEDEP Chapter 117]

A. All COMS downtimes and malfunctions;

B. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;

1. Standard exceeded;
2. Date, time, and duration of excess event;
3. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
4. A description of what caused the excess event;
5. The strategy employed to minimize the excess event; and
6. The strategy employed to prevent reoccurrence.

C. A report certifying there were no excess emissions, if that is the case.

(25) Semiannual Reporting

McCain shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and Jan 31st of each year with the initial semiannual report due January 31, 2005. The facility's designated responsible official must sign this report.

The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license.

B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140]

(26) Annual Compliance Certification

McCain shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due January 31 of each year with the initial annual

certification due Jan 31, 2005. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [MEDEP Chapter 140]

(27) Annual Emission Statement

In accordance with MEDEP Chapter 137, McCain shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

A. A computer program and accompanying instructions supplied by the Department;

or

B. A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437

The emission statement must be submitted no later than July 1 or as otherwise specified in Chapter 137.

[MEDEP Chapter 137]

(28) Air Toxics Emissions Statement

In accordance with MEDEP Chapter 137, McCain shall report, no later than July 1, every three years (2006, 2009, etc.) or in a timeframe designated by the Department, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437

The emission statement must be submitted no later than July 1 or as otherwise specified in Chapter 137.

[MEDEP Chapter 137]

(29) General Applicable State Regulations

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, sub-§5	Mercury Emission Limit	Enforceable by State-only

(30) Units Containing Ozone Depleting Substances

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.
[40 CFR, Part 82, Subpart F]

(31) Asbestos Abatement

When undertaking Asbestos abatement activities, McCain shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(32) Risk Management Plan

The licensee is subject to all applicable requirements of 40 CFR Part 68 (Risk Management Plan).

(33) Annual Fee

McCain shall pay the annual air emission license fee within 30 days of Nov 30th of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 23, 1998
Date of application acceptance: March 23, 1998

Date filed with the Board of Environmental Protection _____

This order prepared by Edwin L. Cousins, BAQ